

ABSTRACT

A directional antenna array is provided that includes a driven element and a first parasitic element separated from the driven element with the first parasitic element and/or the driven element having a width that is greater than about one-half a percent (0.5%) of an free-space wavelength of the directional antenna array. Alternatively or in conjunction, the directional antenna array includes a balun structure that is configured to couple the driven element to at least one of an electromagnetic energy source and an electromagnetic sink, and the balun structure includes a dipole structure, a first feed point extending from the dipole structure and a second feed point extending from the first parasitic element.